

Voltage = energy per charge

1. How much work is done in moving 5.0 coulombs of charge against a potential difference of 12 volts?

- 1) 2.4 J
- 2) 12 J
- 3) 30. J
- 4) 60. J

2. An electrical potential of one joule per coulomb is equal to

- 1) one coulomb
- 2) one ampere
- 3) one ohm
- 4) one volt

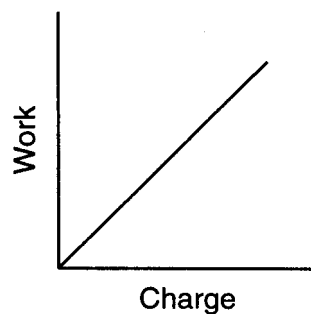
3. The work required to move 2 coulombs of charge through a potential difference of 5 volts is

- 1) 10 J
- 2) 2 J
- 3) 25 J
- 4) 50 J

4. If 4 joules of work are required to move 2 coulombs of charge through a 6-ohm resistor, the potential difference across the resistor is

- 1) 1 V
- 2) 2 V
- 3) 6 V
- 4) 8 V

5. The graph below shows the relationship between the work done on a charged body in an electric field and the net charge on the body.



What does the slope of this graph represent?

- 1) power
- 2) potential difference
- 3) force
- 4) electric field intensity

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Answer Key

1. 4

2. 4

3. 1

4. 2

5. 2
